(c) The Department of Wastelands Development has commissioned National Wastelands Identification Project with the collaboration of the National Remote Sensing Agency. Under this Programme 228 districts in the country having more than 5% of the geographical area as wastelands have been mapped. Precise information regarding the whole country including Orissa is not available. However according to one estimate, the extent of wastelands in Orissa is 6.38 million hectares.

Amorphous Nature of Alkaline Solids

5015. SHRI JAGANNATH SINGH : Will the PRIME MINISTER be pleased to state :

(a) whether Government are aware of the technology of "Amorphous Nature of Alkaline Solids" developed by Seema Bhatia of Delhi University; and

(b) if so, the details thereof and what action is taken by Government in this regard till now ?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE AND THE MINISTER OF STATE IN THE DEPARTMENTS OF ATOMIC ENERGY, SPACE AND THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BHUVNESH CHATURVEDI) : (a) and (b) Government is not aware of the technology developed by Ms. Seema Bhatia of Delhi University.

Commercialisation of the knowledge base of C.S.I.R.

5016. SHRI SARADA MOHANTY :
SHRI SOM PAL :

Will the PRIME MINISTER be pleased to state :

(-a) whether an expert committee has suggested an action plan to commercialise the knowledge base of the Council of Scientific and Industrial Research (CSIR) as an incentive to scientists for industrial research; and

'(b) if so, what are the details thereof and what action has 'been taken or is being taken thereon ?

THE MINISTER OF STATE IN THE PRIME MMDSIBR*S OFFICE AND THE MINISTER OF STATE UN THE DEPARTMENTS OF ATOMIC ENERGY, SPACE AND THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BHUVNESH CHATURVEDI) : (a) Yes, ST.

(b) The Mashelkar Committee appointed for the purpose had inter-alia recommended revival of earlier practice of sharing of monies/earnings realised from licensing of intellectual property, contract R&D and S&T services with those engaged in generation and marketing of knowledgebase.

The Committee accordingly suggested that 40% of the intellectual fee for all contract research projects, intellectual property licencing and 20% of net surplus of S&T services could be distributed as incentive to such staff.

These recommendations have been approved by the CSIR Society with effect from 1st April, 1994.

Further research on earthquakes after failure of predictions

5017. DR. SHRIKANT RAMCHANDRA JICHKAR : Will the PRIME MINISTER be pleased to state :

(a) whether new research is being mad* in view of the recent earthquake in Maharashtra and the failure of predictions in this area;

(b) if so, what arc the details thereof;

(c) whether the same people who have proved an utter failure in research on earthquakes have been given the task of fresh research or whether experts are being brought afresh for this purpose; and

(d) what are the details in this regard ?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE AND THE MINISTER OF STATE IN THE DEPARTMENTS OF ATOMIC ENERGY, SPACE AND THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BHUVNESH CHATURVEDI): (a)

to (d) Sir, a number of projects relating to geology, geophysics, remote sensing, paleoseismology and geodetic observations in the earthquake affected region have been aporoved. However, th3 science of earthquake prediction has not reached an operational stage anywhere in the world. The total cost of the approved projec s is close to Rs. 3 crores. The projects have been given to both experienced and young scientists depending upon their expertise and the merits of the proposals, as determined by the Expert Advisory Committee.

Expansion Plans for the Department of Space

5018. DR. SHRIKANT RAMCHANDRA JICHKAR : Will the PRIME MINISTER be pleased to state :

(a) whether it is a fact that in view of India's increasing and ambitious space programme, the Department of Space will be expanded;

(b) if so, what are the plans in this regard;

(c) whether any expert advice or consultancy is being sought for such expan^ sion progarmme; and

(d) whether the study by NASA of the USA has been made with reference to augmentation of India's Space Department ?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE AND THE MINISTER OF STATE IN THE DEPARTMENTS OF ATOMIC ENERGY AND SPACE AND THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE & TECHNOLOGY (SHRI BHUVNESH CHATURVEDI): (a) Yes, Sir.

(b) Indian Space Programme, a self reliant programme, envisages development and operationalisation of space services in vital areas of national development such as communication, broadcasting, meteorology, education, disaster management, drought management and management of natural resources such as agricultural crops, forest, water, soils, minerals, fisheries etc., on a continued and enhanced h?.sis. Expansion in these services is olanned in the 1990—2000 Decade Profile of the Department of Space. Forth' coming launches of IRS 1C and INSAT 2C will augment the presently available services through the 'wo national satellite systems, Indian National Satellite (INSAT) System and Indian Remote Sensing Satellite (IRS) System. It is also planned to develop GRAMSAT, a satellite totally dedicated to rural development and eradication of illiteracy. Operationalisation of the launch vehicle. Polar Satellite Launch Vehicle (PSLV), capable of launching IRS class satellite, is also planned. Realisation of the launch vehicle, Geo-synchronous Satellite Launch Vehicle (GSLV) for launch of INSAT class of satellites is also planned. Details in this regard are available in the Annual Report of the Department of Space.

(c) No, Sh.

(d) No, Sir.

Reducing Foreign Dependence in Space Programme

5019. SHRI RAM NATH KOVIND : Will the PRIME MINISTER be pleased to state :

(a) whether Government have embarked on an ambitious space programme for attaining self sufficiency, both in space packages and high profile launching stations;

(b) if so, what is the ratio of indigenous-foreign import in our various systems at pesent;

(c) whether Government have any plan and schedule to reduce foreign import ratio in our system;

(d) if so, what are the core contents of these plans and schedules; and

(e) by when Government expect that there will be zero dependency on foreign imports in the system ?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE AND THE MINISTER OF STATE IN THE DEPARTMENTS OF ATOMIC ENERGY AND SPACE AND THE MINISTER OF